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ABSTRACT

This guide assists educators in the process of implementing or strengthening a using the Environment as an Integrating Context for learning (EIC) program in their school. This self-evaluation guide provides teachers and principals with an instrument that they can use to assess the current status of their programs in relation to the leadership that characterizes a strong EIC program. This document begins with a Summary of the Major Educational Components for EIC Programs. Selection of these components was based on research into the pedagogies common to schools that successfully implement EIC. The body of the guide presents self-evaluation rubrics organized around each of the educational components. Each component is described on a rubric sheet that defines important terminology and explains other significant aspects of EIC. The rubric sheets delineate several measurable attributes that educators can use to help determine the progress of their program. The Self-Evaluation Summary for EIC Implementation allows educators to gather information from the individual rubric sheets. (SAH)

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State Education & Environment Roundtable

ED 449 020

Implementing and Strengthening an EIC Program in Your School

A Self-evaluation Guide

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To learn more about EIC:
The State Education and Environment Roundtable maintains a site on the Internet devoted to information on EIC-based learning: **http://www.seer.org**. The site contains a variety of links to participating state agencies, reports, reference materials, and other educational resources.

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Disclaimer

The opinions expressed in this report are those of the authors and do not necessarily reflect the views of The Pew Charitable Trusts, the Council of Chief State School Officers or the member agencies of SEER.

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INTRODUCTION

The State Education and Environment Roundtable (SEER) developed this document to assist educators in the process of implementing or strengthening an EIC[1] program in their school. The purpose of this *Self-evaluation Guide* is to provide teachers and principals with an instrument they can use to assess the current status of their programs in relation to the principal educational characteristics of EIC.

The rubrics presented in this document are only one component in SEER's Professional Development Series. This guide is intended for use in conjunction with supporting documents and other resource materials. Educators who participate in one of SEER's EIC Implementation Seminars receive specific preparation in using these self-assessment rubrics to evaluate their programs.

Research about the educational efficacy of the EIC approach and other background information are provided in SEER's report, *Closing the Achievement Gap: Using the Environment as an Integrating Context for Learning* (Lieberman and Hoody, 1998). This report documents a two-year, nationwide study of 40 schools that use EIC. Two videos compliment the report. *Beyond Walls, Across Disciplines* presents an elementary, middle and high school implementing EIC and shows EIC's potential across the disciplines. *Closing the Achievement Gap: A Video Summary* provides an overview of the research results with accompanying comments from educators implementing EIC.

This document begins with a *Summary of the Major Educational Components of EIC Programs*. Selection of these components was based on SEER's research into the pedagogies common to schools that are successfully implementing EIC.

The body of the guide presents *Self-evaluation Rubrics* organized around each of the educational components. Each component is described on a rubric sheet that defines important terminology and explains other significant aspects of EIC. The rubric sheets delineate several measurable attributes that educators can use to help determine the progress of their program in relation to those attributes.

The rubric sheets provide a simple chart, associated with each attribute, with space for educators to rank the current status of EIC in their program or school. A ranking of "4" indicates the "ideal" situation while "1" indicates a basic level of accomplishment. Each sheet also allows space for describing current practices, benefits and first steps toward "moving up the rubrics."

The *Self-Evaluation Summary for EIC Implementation*, toward the end of the document, allows educators to gather together the information from the individual rubric sheets. They can use this summary to evaluate the overall status of their program and set priorities for their follow-up activities.

Comparing rubric sheets from one year to the next allows educators to self-evaluate their progress. This "internal" status report can be helpful to teams as they set their goals, implement new program activities, work toward further improvement and participate in ongoing self-evaluation.

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1 EIC (using the Environment as an Integrating Context for learning), defines a framework for education: a framework for interdisciplinary, collaborative, student-centered, hands-on and engaged learning. EIC, a term coined by the State Education and Environment Roundtable, encompasses the educational practices that the group believes should form the foundation of environment-based education in America's schools. The conceptual structure of EIC and SEER's research results can be found in "Closing the Achievement Gap: Using the Environment as an Integrating Context for Learning," by Gerald A. Lieberman and Linda L. Hoody. For information on obtaining copies, contact the State Education and Environment Roundtable, 16486 Bernardo Center Drive, Suite 328, San Diego, CA 92128, (858) 676-0272, or visit their Internet site http://www.seer.org.

SUMMARY OF THE MAJOR EDUCATIONAL COMPONENTS OF EIC PROGRAMS

EIC programs employ:

I. **Natural and Community Settings, the Local Environment, as a Context for Learning** — EIC educators:
   A. Use local natural and community settings as a context for standards-based instruction;
   B. Develop students' understanding of natural and socio-cultural systems;
   C. Incorporate the community's cultural characteristics; and,
   D. Offer students opportunities to apply skills and knowledge in local settings.

II. **Integrated, Interdisciplinary Instruction** — EIC educators:
   A. Provide students with opportunities to explore connections between subject area disciplines and, among natural and social systems;
   B. Coordinate students' learning between subject areas and class periods;
   C. Cross traditional disciplinary boundaries to develop comprehensive understanding of natural and socio-cultural systems; and,
   D. Create a continuum of learning that crosses grade levels and allows students to conduct multi-year research and service-learning projects that contribute to their community.

III. **Problem-, Issue-based Instruction** — EIC educators:
   A. Provide students with opportunities to investigate real-world community problems and issues;
   B. Encourage use of higher-level thinking and creative problem-solving skills to achieve comprehensive understanding of the complexity of real-world problems and issues involving the interaction of their natural surroundings with diverse cultural, economic, and political perspectives and interests;
   C. Support students as they undertake and monitor service-learning activities; and,
   D. Require students to reflect on their service-learning activities and communicate their findings to classmates, teachers and other appropriate audiences both inside and outside of their community.

IV. **Collaborative Instruction** — EIC educators:
   A. Involve students and community members in planning and instructional delivery;
   B. Provide opportunities for teachers to model positive team relationships; and,
   C. Allow teachers to have regularly scheduled team meetings.

V. **Learner-centered, Constructivist Methods** — EIC educators:
   A. Take into account students' individual learning styles, multiple intelligences and cultural background to insure effective instructional design and practices in the context of the local community;
   B. Assist students as they initiate self-directed courses of study;
   C. Allow students to construct their own understandings;
   D. Provide students with opportunities to pursue authentic issues of personal interest to them; and,
   E. Support students as they define specific learning goals and objectives.

VI. **Independent and Cooperative Learning** — EIC educators:
   A. Facilitate students as they form teams to work on projects and investigations;
   B. Assure that student teams include a wide range of learning styles and ability levels; and,
   C. Help students develop group membership skills.

VII. **Authentic Assessment of Learning** — EIC educators:
   A. Use authentic assessment methods to measure students' comprehensive understanding and, standards-based knowledge and skills;
   B. Utilize authentic assessment methods to measure students' ability to apply knowledge and skills in real-world situations; and,
   C. Assess students' mastery of skills, knowledge and conceptual understanding using multiple measures that account for learning styles and "multiple intelligences."

Using Natural and Community Settings, the Local Environment, as a Context for Learning

EIC programs use their natural and community surroundings as a comprehensive focus and framework for learning. Since local communities vary dramatically, the term "environment" means different things at every school. In creating an EIC curriculum, educators have the opportunity to define the local environment broadly, to encompass the natural ecosystems and the socio-cultural systems (political, economic, cultural and historical) of their community.

An EIC program:

A. Uses local natural and community settings as a context for standards-based instruction.

4 Consistently uses the local environment as the context for standards-based instruction.

3 Often uses the local environment as the context for standards-based instruction.

2 Occasionally uses the local environment as the context for instruction.

1 Rarely uses the local environment as the context for instruction.

Circle the number that most closely describes your program or school. Circle as appropriate 4 3 2 1	Describe current practice:
Benefits you or your students might gain by "moving up the rubric"	
First steps that you and your team might take to "move up the rubric"	

B. Develops students' understanding of natural and socio-cultural systems.

4 Consistently uses the local environment to develop understanding of natural and socio-cultural systems, their components, interrelationships and interactions among systems.

3 Often uses the local environment to develop understanding of natural and socio-cultural systems, their components, interrelationships and interactions among systems.

2 Occasionally uses the local environment to develop understanding of the components of natural and socio-cultural systems.

1 Rarely uses the local environment to develop understanding of the components of natural and socio-cultural systems.

Circle the number that most closely describes your program or school. Circle as appropriate 4 3 2 1	Describe current practice:
Benefits you or your students might gain by "moving up the rubric"	
First steps that you and your team might take to "move up the rubric"	

C. Incorporates the community's cultural characteristics.

4 Consistently uses instruction in local surroundings to strengthen understanding of cultural characteristics, economic structures and decision-making processes and to provide a venue within which students can apply their skills and knowledge.

3 Often uses instruction in local surroundings to strengthen understanding of cultural characteristics, economic structures and decision-making processes within their community.

2 Occasionally uses instruction in local surroundings to foster understanding of cultural characteristics, economic structures and decision-making processes.

1 Rarely uses instruction in local surroundings to develop understanding of culture, economics or decision-making.

Circle the number that most closely describes your program or school Circle as appropriate: 4 3 2 1	Describe current practice:
Benefits you or your students might gain by "moving up the rubric":	
First steps that you and your team might take to "move up the rubric":	

D. Offers students opportunities to apply skills and knowledge in local settings.

4 Consistently uses local surroundings to provide opportunities for applying skills and knowledge to real-world projects, problems or issues.

3 Often uses local surroundings to provide opportunities for applying skills and knowledge to real-world projects, problems or issues.

2 Occasionally offers opportunities to apply skills and knowledge in local surroundings.

1 Rarely offers opportunities to apply skills and knowledge in local surroundings.

Circle the number that most closely describes your program or school Circle as appropriate: 4 3 2 1	Describe current practice:
Benefits you or your students might gain by "moving up the rubric":	
First steps that you and your team might take to "move up the rubric":	

Using Integrated, Interdisciplinary Instruction

EIC educators weave together instructional plans to create integrated units based on content and skills from multiple disciplines. In addition, educators create a continuum of learning across the grade levels so that conceptual understandings are strengthened and deepened in successive years.

This approach provides students with both specialized disciplinary knowledge and skills, and a means by which they can gain a comprehensive understanding of the natural and social systems that constitute their community. The multi-year continuum provides students the opportunity to expand their base of research data and make further contributions through their service-learning projects.

An EIC program:

A. Provides students with opportunities to explore connections between subject area disciplines and, among natural and social systems.

4 Consistently provides opportunities to explore connections among various academic content areas and develop higher-level thinking skills through investigations of the interactions among natural and social systems.

3 Often provides opportunities to explore connections among various academic content areas through investigations of the interactions among natural and social systems.

2 Occasionally provides opportunities to explore connections among various content areas.

1 Rarely provides opportunities to explore connections among various academic content areas.

Circle the number that most closely describes your program or school Circle as appropriate 4 3 2 1	Describe current practice
Benefits you or your students might gain by "moving up the rubric"	
First steps that you and your team might take to "move up the rubric"	

B. Coordinates students' learning between subject areas and class periods.

4 Consistently coordinates learning opportunities so that students simultaneously work on interrelated aspects of the same organizing questions or themes in several subject areas and class periods.

3 Often coordinates learning opportunities so that students simultaneously work on interrelated aspects of the same organizing questions or themes in several subject areas.

2 Occasionally coordinates learning opportunities so that students simultaneously work on interrelated aspects of the same assignment in several subject areas.

1 Rarely coordinates learning opportunities so that students simultaneously work on interrelated aspects of the same assignment in several subject areas.

Circle the number that most closely describes your program or school Circle as appropriate 4 3 2 1	Describe current practice
Benefits you or your students might gain by "moving up the rubric"	
First steps that you and your team might take to "move up the rubric"	

C. Crosses traditional disciplinary boundaries to develop comprehensive understanding of natural and socio-cultural systems.

4 Consistently utilizes curriculum that crosses traditional disciplinary boundaries so students can interconnect knowledge and skills from a variety of subject areas to generate a comprehensive understanding of natural and socio-cultural systems.

3 Often utilizes curriculum that crosses traditional disciplinary boundaries so students can interconnect knowledge and skills from a variety of subject areas to better understand natural or socio-cultural systems.

2 Occasionally utilizes curriculum that crosses traditional disciplinary boundaries so students can learn how knowledge and skills from a variety of subject areas are interconnected.

1 Rarely utilizes curriculum that crosses traditional disciplinary boundaries to interconnect subject areas.

Circle the number that most closely describes your program or school. Circle as appropriate 4 3 2 1	Describe current practice:
Benefits you or your students might gain by "moving up the rubric":	
First steps that you and your team might take to "move up the rubric":	

D. Creates a continuum of learning that crosses grade levels and allows students to conduct multi-year research and service-learning projects that contribute to their community.

4 Consistently connects conceptual understandings through a continuum of learning that crosses grade levels and allows students to conduct multi-year research and service-learning projects.

3 Often connects conceptual understandings across grade levels and allows students to conduct multi-year projects.

2 Occasionally connects conceptual understandings and projects across grade levels.

1 Rarely connects conceptual understandings across grade levels.

Circle the number that most closely describes your program or school. Circle as appropriate 4 3 2 1	Describe current practice:
Benefits you or your students might gain by "moving up the rubric":	
First steps that you and your team might take to "move up the rubric":	

Problem-, Issue-based Instruction

The focus of problem-, issue-based instruction is challenging students to solve real-world problems and investigate actual issues affecting their community and the needs of their local area or watershed. Investigations should also provide students opportunities to develop a greater understanding of the diverse cultural, economic, and political perspectives and interests within their community.

In contrast to traditional approaches of assigning an application problem at the end of a conceptual unit, problem-based learning uses authentic issues, problems and projects to motivate, focus and initiate student learning.

An EIC program:

A. Provides students with opportunities to investigate real-world community problems and issues.

4 Consistently provides authentic learning experiences that allow students to identify, compare, select, and investigate local, real-world problems, issues and projects with community support.

3 Often provides authentic learning experiences that allow students to select and investigate local, real-world problems, issues and projects with community support.

2 Occasionally provides authentic learning experiences that allow students to investigate real-world problems, issues and projects in their community.

1 Rarely provides authentic learning experiences that allow students to investigate their community.

Circle the number that most closely describes your program or school Circle as appropriate 4 3 2 1	Describe current practice
Benefits you or your students might gain by "moving up the rubric"	
First steps that you and your team might take to "move up the rubric"	

B. Encourages use of higher-level thinking and creative problem-solving skills to achieve comprehensive understanding of the complexity of real-world problems and issues involving the interaction of their natural surroundings with diverse cultural, economic, and political perspectives and interests.

4 Consistently encourages use of higher-level thinking and creative problem-solving skills to achieve multi-dimensional, comprehensive understanding of real-world community problems and issues.

3 Often encourages use of higher-level thinking and creative problem-solving skills to achieve multi-dimensional, comprehensive understanding of real-world community problems and issues.

2 Occasionally encourages use of higher-level thinking skills to achieve comprehensive understanding of real-world problems and issues.

1 Rarely encourages use of higher-level thinking skills to achieve understanding of real-world issues.

Circle the number that most closely describes your program or school Circle as appropriate 4 3 2 1	Describe current practice
Benefits you or your students might gain by "moving up the rubric"	
First steps that you and your team might take to "move up the rubric"	

C. Supports students as they undertake and monitor service-learning activities.

4 Consistently supports students as they design, undertake and monitor service-learning activities that help them achieve academic goals while resolving local problems, encouraging their sense of stewardship and making meaningful contributions to their community.

3 Often undertakes and monitors service-learning activities that help them achieve academic goals while resolving local problems and encouraging the students' sense of stewardship.

2 Occasionally undertakes and monitors service-learning activities that help them achieve their academic goals while resolving local problems.

1 Rarely undertakes activities to resolve local problems that are connected to the curriculum.

Circle the number that most closely describes your program or school. Circle as appropriate: 4 3 2 1	Describe current practice:
Benefits you or your students might gain by "moving up the rubric":	
First steps that you and your team might take to "move up the rubric":	

D. Requires students to reflect on their service-learning activities and communicate their findings to classmates, teachers and other appropriate audiences both inside and outside of their community.

4 Consistently requires students to reflect on their service-learning activities and communicate their findings or accomplishments through reports, presentations or publications to classmates, teachers and other appropriate audiences in their school, and inside and outside of their community.

3 Often requires students to reflect on their service-learning activities and communicate their findings or accomplishments through reports, presentations or publications to classmates, teachers and other school audiences.

2 Occasionally requires students to reflect on their service-learning activities and communicate their findings or accomplishments through reports and presentations to classmates and teachers.

1 Rarely requires students to communicate their findings or accomplishments.

Circle the number that most closely describes your program or school. Circle as appropriate: 4 3 2 1	Describe current practice:
Benefits you or your students might gain by "moving up the rubric":	
First steps that you and your team might take to "move up the rubric":	

Collaborative Instruction

Collaborative teaching teams in EIC programs are comprised of many instructional partners from the school and local community. As part of the instructional team, the term "community members" is broadened to include parents, senior citizens, specialists from local businesses, personnel from government agencies, colleges and universities, zoos and nature centers. All of these individuals work with teachers to create a learning atmosphere where students are exposed to a network of people representing: a variety of economic, political and cultural viewpoints; specialized skills; and, knowledge.

An EIC program:

A. Involves students and community members in planning and instructional delivery.

4 Consistently involves the entire instructional team (teachers, administrators, students and community members) in creating a shared vision, planning curriculum and delivering instruction.

3 Often involves the entire instructional team in planning curriculum and delivering instruction.

2 Occasionally involves community members and students in the delivery of instruction.

1 Rarely involves community members and students in the delivery of instruction.

Circle the number that most closely describes your program or school Circle as appropriate 4 3 2 1	Describe current practice:
Benefits you or your students might gain by "moving up the rubric":	
First steps that you and your team might take to "move up the rubric":	

B. Provides opportunities for teachers to model positive team relationships.

4 Consistently encourages teachers to model, for other teachers, sharing the workload; assigning team responsibilities; providing specialized skills in support of others; and challenging each others' ideas through constructive dialogue.

3 Often encourages teachers to model, for other teachers, sharing the workload; assigning team responsibilities; and providing specialized skills in support of others.

2 Occasionally encourages teachers to model sharing the workload and assigning team responsibilities.

1 Rarely encourages teachers to model sharing the workload and assigning team responsibilities.

Circle the number that most closely describes your program or school Circle as appropriate 4 3 2 1	Describe current practice:
Benefits you or your students might gain by "moving up the rubric":	
First steps that you and your team might take to "move up the rubric":	

C. Allows teachers to have regularly scheduled team meetings.

4 Consistently allows teachers to meet, at least weekly, to evaluate students' progress, resolve logistical issues, make team decisions and adjust team plans accordingly.

3 Often allows teachers to meet, at least weekly, to resolve logistical issues, make team decisions and adjust team plans accordingly.

2 Occasionally allows teachers to meet to resolve logistical issues and make team decisions.

1 Rarely allows teachers to meet to resolve logistical issues and make team decisions.

Circle the number that most closely describes your program or school. Circle as appropriate: 4 3 2 1	Describe current practice:
Benefits you or your students might gain by "moving up the rubric":	
First steps that you and your team might take to "move up the rubric":	

Learner-centered, Constructivist Methods

Learner-centered, constructivist approaches are based on the theory that learners need to build their own understanding of new ideas. It is learning that takes into account students' learning styles, multiple intelligences and cultural background, as well as, prior experience and individual skills and knowledge. While carrying out investigations, learners find pieces of information that don't "fit." Thus, they begin to break down old ideas and reconstruct them. The clarity students gain in understanding a concept gives them the ability to apply this understanding to new problems, in new situations. Teachers promoting constructivist approaches structure a learning environment that promotes opportunities for students to build personalized understanding of new information.

An EIC program:

A. Takes into account students' individual learning styles, multiple intelligences and cultural background to insure effective instructional design and practices in the context of the local community.

4 Consistently fosters instructional practices that account for students 'individual learning styles, multiple intelligences and cultural background.

3 Often includes instructional practices that consider students 'individual learning styles, multiple intelligences and cultural background.

2 Occasionally uses instructional practices that consider students 'individual learning styles and multiple intelligences.

1 Rarely uses instructional practices that consider students 'individual learning styles and multiple intelligences.

Circle the number that most closely describes your program or school. Circle as appropriate: 4 3 2 1	Describe current practice:
Benefits you or your students might gain by "moving up the rubric":	
First steps that you and your team might take to "move up the rubric":	

B. Assists students as they initiate self-directed courses of study.

4 Consistently supports all students in their self-initiated and self-directed courses of study, aligned to a standards-based framework determined by their teachers.

3 Often supports students in their self-directed courses of study within a standards-based framework determined by their teachers.

2 Occasionally supports students in their self-directed courses of study.

1 Rarely supports students in their self-directed courses of study.

Circle the number that most closely describes your program or school. Circle as appropriate: 4 3 2 1	Describe current practice:
Benefits you or your students might gain by "moving up the rubric":	
First steps that you and your team might take to "move up the rubric":	

C. Allows students to construct their own understandings.

4 Consistently supports students as they compare and contrast newly acquired information with prior knowledge to synthesize and construct their own understandings and perspectives.

3 Often supports students as they compare and contrast newly acquired information with prior knowledge to synthesize their understandings.

2 Occasionally supports students as they combine newly acquired information with prior knowledge.

1 Rarely supports students as they combine newly acquired information with prior knowledge.

Circle the number that most closely describes your program or school. Circle as appropriate: 4 3 2 1	Describe current practice:
Benefits you or your students might gain by "moving up the rubric":	
First steps that you and your team might take to "move up the rubric":	

D. Provides students with opportunities to pursue authentic issues of personal interest to them.

4 Consistently offers students opportunities to work on authentic problems, issues and projects that they identify and are interested in undertaking.

3 Often offers students opportunities to work on authentic problems, issues and projects that they identify and are interested in undertaking.

2 Occasionally offers students opportunities to work on projects they identify and that interest them.

1 Rarely offers students opportunities to work on projects that interest them.

Circle the number that most closely describes your program or school. Circle as appropriate: 4 3 2 1	Describe current practice:
Benefits you or your students might gain by "moving up the rubric":	
First steps that you and your team might take to "move up the rubric":	

E. Supports students as they define specific learning goals and objectives.

4 Consistently supports students as they define specific learning goals and objectives for their program of study; develop individualized learning strategies; and, design self-evaluation methods to meet agreed-upon goals.

3 Often supports students as they define specific learning goals and objectives for their program of study, and develop individualized learning strategies.

2 Occasionally supports students as they define specific learning goals and objectives for their program of study.

1 Rarely supports students as they define specific learning goals for their program of study.

Circle the number that most closely describes your program or school. Circle as appropriate: 4 3 2 1	Describe current practice:
Benefits you or your students might gain by "moving up the rubric":	
First steps that you and your team might take to "move up the rubric":	

Independent and Cooperative Learning

The diversity of knowledge and skills that students need to succeed, when working in the context of the environment, encourages the use of cooperative learning. The variety of components in their EIC studies makes it possible for students to contribute to the team effort at the same time as they are developing their individual skills and abilities. Student teams can take a variety of forms that may include different age groups, classes or schools.

An EIC program:

A. Facilitates students as they form teams to work on projects and investigations.

4 Consistently facilitates students as they form teams; define individual roles within the group; identify personal tasks; and, create and implement a team workplan to complete their projects or investigations.

3 Often guides students as they work in teams, identify personal tasks and implement a team workplan to complete their projects or investigations.

2 Occasionally allows students to work in teams as they implement a team workplan to complete their projects or investigations.

1 Rarely allows students to work in teams to complete their projects or investigations.

Circle the number that most closely describes your program or school Circle as appropriate: 4 3 2 1	Describe current practice:
Benefits you or your students might gain by "moving up the rubric":	
First steps that you and your team might take to "move up the rubric":	

B. Assures that student teams include a wide range of learning styles and ability levels.

4 Consistently assures that teams take advantage of students' diverse interests, skill levels, knowledge, learning styles and interpersonal abilities.

3 Often assures that teams take advantage of students' diverse interests, skill levels and learning styles.

2 Occasionally organizes teams to take advantage of students' diverse skill levels and learning styles.

1 Rarely organizes teams to take advantage of students' diverse skill levels and learning styles.

Circle the number that most closely describes your program or school Circle as appropriate: 4 3 2 1	Describe current practice:
Benefits you or your students might gain by "moving up the rubric":	
First steps that you and your team might take to "move up the rubric":	

C. Helps students develop group membership skills.

4 Consistently provides students with the opportunity to develop understanding of group dynamics and enhance their teamwork skills.

3 Often provides students with the opportunity to develop understanding of group dynamics and enhance their teamwork skills.

2 Occasionally provides students with the opportunity to develop their teamwork skills.

1 Rarely provides students with the opportunity to develop their teamwork skills.

Circle the number that most closely describes your program or school. Circle as appropriate: 4 3 2 1	Describe current practice:
Benefits you or your students might gain by "moving up the rubric":	
First steps that you and your team might take to "move up the rubric":	

Authentic Assessment of Learning

Authentic or performance-based assessment is a form of testing that requires teachers to make judgements about students' demonstration of their knowledge, skills and affective characteristics. In performance-based assessments, students are required to perform a task rather than select an answer from a ready-made list. It involves the assessment of students in the context of real-world tasks and requires students to actively accomplish complex and significant activities, based on prior knowledge, recent learning and relevant skills to solve realistic or authentic problems. Authentic assessment allows students to move beyond routine and discrete tasks so they can use higher-level thinking and problem solving. Teachers judge the performance of the students' work based on pre-established criteria. Potential types of authentic or performance assessment include essays, portfolios, interviews, observations, work samples and group projects. (Adapted from "What is Performance-based Assessment?" by Marian Fushell).

An EIC program:

A. Uses authentic assessment methods to measure students' comprehensive understanding and, standards-based knowledge and skills.

4 Consistently uses authentic assessment methods to measure students' comprehensive understanding of natural and socio-cultural systems in addition to standards-based disciplinary knowledge and skills.

3 Often uses authentic assessment methods to measure students' comprehensive understanding of natural and socio-cultural systems in addition to standards-based disciplinary knowledge and skills.

2 Occasionally uses authentic assessment methods to measure students' understanding of standards-based disciplinary knowledge and skills.

1 Rarely uses authentic assessment methods to measure students' understanding of standards-based disciplinary knowledge and skills.

Circle the number that most closely describes your program or school Circle as appropriate 4 3 2 1	Describe current practice
Benefits you or your students might gain by "moving up the rubric"	
First steps that you and your team might take to "move up the rubric":	

B. Utilizes authentic assessment methods to measure students' ability to apply knowledge and skills in real-world situations.

4 Consistently uses authentic assessment methods to measure students' ability to apply subject area knowledge and higher-level thinking skills in real-world situations.

3 Often uses authentic assessment methods to measure students' ability to apply subject area knowledge and higher-level thinking skills in real-world situations.

2 Occasionally uses authentic assessment methods to measure students' ability to apply subject area knowledge in real-world situations.

1 Rarely uses authentic assessment methods to measure students' ability to apply subject area knowledge in real-world situations.

Circle the number that most closely describes your program or school Circle as appropriate: 4 3 2 1	Describe current practice:
Benefits you or your students might gain by "moving up the rubric":	
First steps that you and your team might take to "move up the rubric":	

C. Assesses students' mastery of skills, knowledge and conceptual understanding using multiple measures that account for learning styles and "multiple intelligences."

4 Consistently assesses mastery of skills, knowledge and conceptual understanding of students using multiple measures that take into account diverse learning styles and "multiple intelligences."

3 Often assesses mastery of skills, knowledge and conceptual understanding of students using multiple measures that take into account diverse learning styles and "multiple intelligences."

2 Occasionally assesses mastery of skills, knowledge and conceptual understanding of students using multiple measures that take into account diverse learning styles.

1 Rarely assesses mastery of skills, knowledge and conceptual understanding of students using multiple measures that take into account diverse learning styles.

Circle the number that most closely describes your program or school Circle as appropriate: 4 3 2 1	Describe current practice:
Benefits you or your students might gain by "moving up the rubric":	
First steps that you and your team might take to "move up the rubric":	

SELF-EVALUATION SUMMARY FOR EIC IMPLEMENTATION

School Name:_____ Date Completed:_____

Use this page to summarize the scores you gave your school on each of the previous pages.

Natural and Community Settings, the Local Environment, as a Context for Learning	**Circle as appropriate**
A. Use local natural and community settings as a context for standards-based instruction	4 3 2 1
B. Develop students' understanding of natural and socio-cultural systems	4 3 2 1
C. Incorporate the community's cultural characteristics	4 3 2 1
D. Offer students opportunities to apply skills and knowledge in local settings	4 3 2 1

Integrated, Interdisciplinary Instruction	**Circle as appropriate**
A. Provide students with opportunities to explore connections between subject area disciplines and, among natural and social systems	4 3 2 1
B. Coordinate students' learning between subject areas and class periods	4 3 2 1
C. Cross traditional disciplinary boundaries to develop comprehensive understanding of natural and socio-cultural systems	4 3 2 1
D. Create a continuum of learning that crosses grade levels and allows students to conduct multi-year research and service-learning projects that contribute to their community	4 3 2 1

Problem-, Issue-based Instruction	**Circle as appropriate**
A. Provide students with opportunities to investigate real-world community problems and issues	4 3 2 1
B. Encourage use of higher-level thinking and creative problem-solving skills to achieve comprehensive understanding of the complexity of real-world problems and issues;	4 3 2 1
C. Support students as they undertake and monitor service-learning activities	4 3 2 1
D. Require students to reflect on their service-learning activities and communicate their findings to classmates, teachers and other appropriate audiences both inside and outside of their community	4 3 2 1

Collaborative Instruction	**Circle as appropriate**
A. Involve students and community members in planning and instructional delivery	4 3 2 1
B. Provide opportunities for teachers to model positive team relationships	4 3 2 1
C. Allow teachers to have regularly scheduled team meetings	4 3 2 1

Learner-centered, Constructivist Methods	**Circle as appropriate**
A. Take into account students' individual learning styles, multiple intelligences and cultural background to insure effective instructional design and practices in the context of the local community	4 3 2 1
B. Assist students as they initiate self-directed courses of study	4 3 2 1
C. Allow students to construct their own understandings	4 3 2 1
D. Provide students with opportunities to pursue authentic issues of personal interest to them	4 3 2 1
E. Support students as they define specific learning goals and objectives	4 3 2 1

Independent and Cooperative Learning,	**Circle as appropriate**
A. Facilitate students as they form teams to work on projects and investigations	4 3 2 1
B. Assure that student teams include a wide range of learning styles and ability levels	4 3 2 1
C. Help students develop group membership skills	4 3 2 1

Authentic Assessment of Learning	**Circle as appropriate**
A. Use authentic assessment methods to measure students' comprehensive understanding and, standards-based knowledge and skills	4 3 2 1
B. Utilize authentic assessment methods to measure students' ability to apply of knowledge and skills in real-world situations	4 3 2 1
C. Assess students' mastery of skills, knowledge and conceptual understanding using multiple measures that account for learning styles and "multiple intelligences"	4 3 2 1

A WORD OF ENCOURAGEMENT

EIC, using the environment as an integrating context for learning, is an educationally beneficial, yet complex, methodology that requires the use of seven pedagogical approaches. Educators should feel encouraged if they are making progress with any of the seven educational components and beginning to see their programs "moving up the rubrics." In some cases, progressing from a "1" to a "2" or a "2" to a "3" can be more difficult than moving from a "3" to a "4."

While in an ideal situation an EIC program would achieve a ranking of "4" on every attribute of EIC's major educational components, in practice this is not realistic. Educators can expect that their programs will be strong in some areas and weak in others. They should also anticipate significant year-to-year fluctuations as teaching teams, students and administrators change.

This self-evaluation guide is just one tool in the complex process of achieving school improvement. Educators, from some of the most successful EIC programs, have suggested some other key steps. Their recommendations include:

- building a team with like-minded teachers;
- designating one or two individuals to be the team's hub of communication;
- beginning planning well in advance of implementation;
- investing ample time right from the start, formulating team plans for curricular integration requires substantial preparation;
- starting small, perhaps one teaching team and one or two month-long study units;
- building gradually, adding new team members and increasing the number of study units;
- seeking administrative guidance, "buy-in," and support from the inception;
- establishing a network of support involving both community and technical resources such as: parents, local businesses, and other community members; university faculty, resource management agencies (water district, parks department, etc.), nature centers, zoos, and museums; and,
- reviewing your progress, self-evaluating, and asking others for suggestions about how to improve and expand your program.

Perhaps most important, be patient. SEER's research suggests that it takes three to four years for teams to solidify and programs to gain stability. Equally significant, however, the research indicates that the time and effort invested provides important long-term benefits for students and teachers.

NOTES

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